HAER No. OR-99

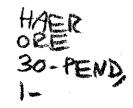
EAST PENDLETON OVERCROSSING
SE Court Avenue, between SE 10th Street
and 13th Streets,
The Pendleton Highway (U.S. Route 30)
Pendleton
Umatilla County
Oregon

PHOTOCRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENCINEERING RECORD Columbia Cascade Support Office National Park Service 909 First Avenue Seattle, Washington 98104-1060

HISTORIC AMERICAN ENGINEERING RECORD



EAST PENDLETON OVERCROSSING HAER No. OR-99

Location:

SE Court Avenue, between SE 10th Street and SE 13th Street, the Pendleton

Highway (U.S. 30), in the City of Pendleton, Umatilla County, Oregon.

USGS Pendleton Oregon Quadrangle UTM Coordinates: 1.361680.509140

1.362040.509060

Date of Construction: 1936-7

Engineer:

Conde B. McCullough, Oregon State Bridge Engineer

Builders:

Colonial Construction Company, Spokane, under a cooperative agreement with:

Oregon State Highway Commission, and the U.S. Bureau of Public Roads

Present Owner:

Oregon Department of Transportation

Present Use:

Highway Bridge

Significance:

The East Pendleton Overcrossing is significant as a virtually intact example of the work of engineer Conde B. McCullough. McCullough served as State Bridge Engineer, and later as the Assistant State Highway Engineer, for Oregon from

1919 until his death in 1946.

The East Pendleton Overcrossing represents one of the best surviving examples of a McCullough-designed slab, beam, and girder bridge. A popular style, with over 900 such structures identified in the 1983-1985 ODOT bridge inventory. consultation with the ODOT Bridge Section determined that five of these structures shared sufficient construction technology, aesthetics, form and antiquity to serve as an appropriate context for the evaluation of the East Pendleton Overcrossing. (Chappel, 1993) Within that context, the East Pendleton Overcrossing retained the highest degree of integrity and best exemplified the design forms employed by McCullough, demonstrating significance within the body of his work.

The East Pendleton Overcrossing was determined eligible for the National Register of Historic Places on July 14, 1993.

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Transportation

Date:

July 1998

I. DESCRIPTION AND ENGINEERING HISTORY

The East Pendleton Overcrossing was constructed in 1936-37 under the auspices of the Oregon State Highway Commission and Conde B. McCollough, State Bridge Engineer. Construction was carried out by the Colonial Construction Company of Spokane, Washington. The structure is oriented northwest-southeast on S. E. Court Avenue in the City of Pendleton, Umatilla County, Oregon, crossing the Union Pacific Railroad Line. The overcrossing is in its original location and has undergone few modifications since its 1936-37 construction. Most of the historical details remain as designed. The east approach to the overcrossing begins at S. E. 13th Street, while the west end of the structure commences at S. E. 10th Street.

The overcrossing is in the slab, beam, and girder family of bridges and is of the reinforced concrete continuous, tee-beam construction type. At the west end, the structure begins to climb in elevation at 1,080 feet a total of 50 feet at its east terminus. Sixteen arched spans of unequal length characterize the elevation of the structure. The entire length of the overcrossing is 824 feet with a roadway width of 26 feet; the overall width of the structure is 37 feet 6 inches. It is among the longest slab, beam, and girder bridges erected in the state.

The structure in elevation is composed of open spans so that vehicular and pedestrian traffic is not obstructed between S. E. Emigrant and S. E. Court Place. The effect of the design is one of openness, although retaining walls exist on the west end of the overcrossing on both the north and south sides. These walls wrap around grassy areas on both sides and tie into S. E. Court Place on the north side and S. E. Emigrant Avenue to the south. The entire overcrossing appears to "rise from the earth," a known trademark of many of the bridges designed by Conde B. McCollough. (Hadlow, 1992)

Several decorative features are displayed on the East Pendleton Overcrossing; few have been modified since the structure's opening. Decorative elements include a pre-cast concrete railing with a Gothic arch motif (an Oregon State Highway Commission standard handrail design conceived of in 1933), four pairs of concrete pylons that were originally lighted, and accommodations for pedestrian use. The end posts of the railing are curved outward 45° and are scored with vertical and horizontal lines. Decorative brackets protruding from the structure occur at regular intervals under the deck of the overcrossing. Decorative hand posts exist atop every other bracket along the railing. At expansion joints the posts are doubled.

A pair of Art Deco style entrance pylons exist on both the west and east approaches. The pylons are heavy, tapered, square-based, features deeply scored with vertical and horizontal lines. State Highway Commission drawings indicate that the pylons were fitted with electrical conduit and early photographs show globes atop each pylon but these no longer exist. Two pairs of concrete lamp posts were also once present but only those at the west end remain. Original lighting on the east end has been replaced with modern overhead street lights.

A metal commemorative plaque on the northeast end post of the overcrossing was removed sometime between June and October 1992. It read:

Union Pacific Railroad Overcrossing Built Under Co-operative Agreement by the United States Bureau of Public Roads, Oregon State Highway Commission, and Colonial Construction Company Contractors, 1936.

On the west end, landscaped parks on the north and south sides of the overcrossing are defined by mature maple, elm, and cedar trees. Smaller trees and shrubs, including spirea and Oregon grape, adorn the base of each retaining wall. A large maple tree dominates the park space on the south side of the overpass. A concrete bench and stairway on the north side's west end leads pedestrians to the north-side park and the handrail for the stairway is the same Gothic arch design used for the bridge railing. Two safety lights composed of a "red head" warning beacon on top, a newel section in the middle and a concrete pediment are found off the northwest corner of the overcrossing. These appear to be unaltered and historic photographs and the original State Highway Commission drawings both document them as an element of the original design. A third safety light formerly stood in the middle of the roadway intersection at the west entrance to the overcrossing. The light has been removed, likely the result of changed traffic patterns or alignments.

The East Pendleton Overcrossing has undergone little change since its 1935-37 construction and is in fair condition. Minor structural maintenance has taken place but repairs have not significantly altered the historical appearance of the structure. The aesthetic qualities of the East Pendleton Overcrossing are consistent or superior to other bridges of its type and it remains the most intact overall when compared with other resources of similar vintage and design. (Chappel, 1993)

II. SOURCES

- Smith, Dwight A., James A. Norman, and Pieter Dykman. <u>Historic Highway Bridges of Oregon.</u> OHS Press, Portland, 1989.
- Chappel, Jill A. <u>Cultural Resources Technical Report:</u> 10th <u>Street-Eastgate (Pendleton)</u>, <u>Pendleton Highway, Umatilla County</u>. Heritage Research Associates, Inc./Anderson Perry & Associates, 1993.
- Condit, Carl W. American Building Art. Oxford University Press, 1960.
- Hadlow, Robert W. "Conde B. McCullough: The Engineer and Oregon's Bridges." Unpublished paper delivered at the Society for Industrial Archaeology meeting, Buffalo, New York, June 5, 1992.
- McCullough, Conde B. "Design of a Bowstring-Arch Bridge," <u>Engineering News Record</u>, August 27, 1931.
- Pierce, Louis F. "Esthetics in Oregon Bridges McCullough to Date." American Society of Civil Engineers Preprint 80-026, 1980. (On file at the Oregon Department of Transportation, Environmental Section)

III. PROJECT INFORMATION

This documentation has been prepared for the Oregon Department of Transportation, which is proposing to replace the East Pendleton Overcrossing. The purpose of the proposed project is to improve capacity, level of service and safety by replacing the functionally obsolete East Pendleton Overcrossing and improving traffic flow across the structure and on the connecting side streets at either end.